



M-200C DISC MEMORY SYSTEM

A FAST ACCESS MEMORY
DESIGNED SPECIFICALLY FOR
SMALL COMPUTERS

FEATURES

HIGH RELIABILITY
LOW COST
IC LOGIC
FAST ACCESS — HEAD-PER-TRACK
COMPACT SIZE
SPARE TRACKS

TECHNOLOGY

Designed and constructed using AMC technology gained through 12 years of experience in producing high-quality magnetic heads and systems.

RELIABILITY

Moving parts eliminated wherever possible. No complicated electro-mechanical head retraction devices. Ruggedized construction utilizing precision machined castings. Quality and reliability assured by exhaustive computerized testing. Rotating components designed for 10-year life.

SIMPLE INTERFACING

M-200C electronics use IC logic. Interfacing can be easily accomplished due to complete lack of format restrictions. Only 2 bit times required between sectors.

FAST ACCESS

Head-per-track disc memory system uses a single 12 inch diameter nickel cobalt plated disc. 16 to 128 data tracks provide capacities to 3,408,000 bits.

SPARE TRACKS

Head modules are nine track. Eight tracks are used in each module leaving ample spares, selectable by means of a convenient connector arrangement. Storage capacity can be increased by adding head modules.

CONSERVES SPACE

Power supply, read/write electronics, track selection electronics and rotating assembly occupy only 8¾ vertical inches of standard RETMA rack space. The M-200C is also available without electronics.



APPLIED MAGNETICS CORPORATION

MODELS

Model Number	M-200C/5	M-200C/6	M-200C/7	M-200C/8
Maximum Capacity in Bits	426,000	852,000	1,704,000	3,408,000
Number of Data Tracks	16	32	64	128

FUNCTIONAL

Average Access Time	8.7 ms
Maximum Number of Bits/Track	26,624
Number of Timing Tracks	3 (Bit, Sector and Origin)
Recording Technique	Phase Modulation
Bit Packing Density	1000 bpi Average
Serial Data Transfer Rate	1.6 MHz Maximum
Track Switching Time	5 μ sec Maximum
Write-to-Read Recovery Time	10 μ sec Maximum
POWER	115 V $\pm$ 10%, 60 Hz @ 3 amps Max after start up. (50 Hz operation and provision for special voltages optional)

MOTOR

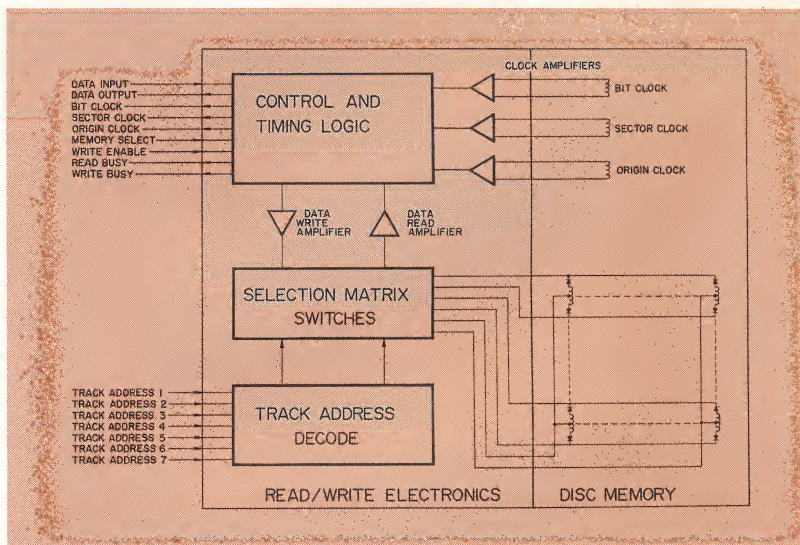
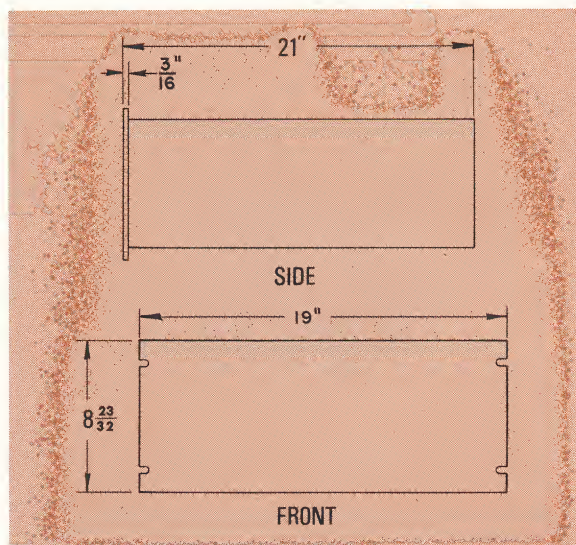
Type	Induction, Capacitor Start
Speed	3,540 RPM

ENVIRONMENT

Temperature	Operating: Normal Room Non-operating: -15°C to 71°C
Humidity	0% to 95% without condensation

MECHANICAL

Size	Refer to Outline Drawing
Weight	55 pounds
Mounting	Standard RETMA Rack



INTERFACE CHARACTERISTICS

Bit Clock — A continuous pulse train of up to 26,624 pulses per disc revolution. The bit clock is always present during disc operation.

Sector Clock — Equally spaced pulses denoting the number of sectors per revolution. The sector clock is always present during disc operation.

Origin Clock — One positive pulse per revolution. The origin clock is always present during disc operation and occurs between two bit clock pulses.

Track Address — A group of lines to select a given track

M-200C/5 — 4 lines

M-200C/6 — 5 lines

M-200C/7 — 6 lines

M-200C/8 — 7 lines

Memory Select — A line to select a given unit when a system contains more than one disc memory. When only one disc memory per system is used, the select line may be used as a read enable signal. The memory select line must be present during a write operation.

Write Command — Enables data to be written on the disc when a write operation is desired; must be absent during a read operation.

Write Busy — Indicates that data is being transferred to and written on the disc.

Read Busy — Indicates that data is being read and transferred from the disc.

Data Input — Must appear as a serial NRZ signal.

Data Output — Will be a serial NRZ signal.